

U.S. Appl. No.

10/491049

DO/EO WORKSHEET

International Appl.

DK 02/00673

Application filed by :

☐ 20 months

☒ 30 months

WIPO PUBLICATION INFORMATION :

Publication No.: WO 03/032740

Publication Language: English

Publication Date: 24 APR 03

Not Published:

☐ U.S. only designated

☐ EP request

Sergio J. Dore
Winston Alvarado
National Stage Pr.
Paraguay Special
7031 305-0021

INTERNATIONAL APPLICATION PAPERS IN THE APPLICATION FILE

☒ International Application (RECORD COPY)

☐ International Appl. on Double Sided Paper (COPIES)

☐ Article 19 Amendments

☐ Request form PCT/RO/101

☐ PCT/IB/331

☒ PCT/ISA/210 - Search Report

☒ PCT/IPEA/409 IPR (PCT/IPEA/416 on front)

☐ Search Report References

☐ Annexes to 409

☐ Other: _____

☒ Priority Document (s) No. 1

RECEIPTS FROM THE APPLICANT (other than checked above):

☒ Basic National Fee (paid or authorized to charge)

☒ Preliminary Amendment(s) Filed on: 03/29/04

☒ Description

☒ Information Disclosure Statement(s) Filed on: 03/29/04

☒ Claims

☐ Assignment Document

☐ Words in the Drawing Figure(s)

☐ Power of Attorney/ Change of Address

☐ Article 19 Amendments

☐ Substitute Specification Filed on: _____

☐ Annexes to 409

☐ entered ☐ not entered

☒ Verified Small Status Claim
(if submitted after Receipt Date - Is it timely? Y/N)

☐ Oath/ Declaration (executed)

☐ Other: _____

☐ DNA Diskette

NOTES :

35 U.S.C. 371 - Receipt of Request (PTO-1390)

03/29/04

Date Acceptable Oath/ Declaration Received

Date Complete 35 U.S.C. 371

102(e) Date

Date of Completion of DO/ EO 906 - Notification of Missing 102(e) Requirements

Date of Completion of DO/ EO 907 - Notification of Acceptance for 102(e) Date

Date of Completion of DO/ EO 911 - Application Accepted Under 35 U.S.C. 111

Date of Completion of DO/ EO 905 - Notification of Missing Requirements

07/22/04

Date of Completion of DO/ EO 916 - Notification of Defective Response

Date of Completion of DO/ EO 903 - Notification of Acceptance

From the
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

10/491049

PCT

To:

MODTAGET

LARSEN & BIRKEHOLM A/S
Skandinavisk Patentbureau
Banegårdspladsen 1
DK-1570 K benhavn V
DANEMARK

- 6 JUNI 2003

Larsen & Birkeholm A/S

NOTIFICATION OF TRANSMITTAL OF
THE INTERNATIONAL PRELIMINARY
EXAMINATION REPORT
(PCT Rule 71.1)

Date of mailing
(day/month/year)

04.06.2003

Applicant's or agent's file reference
17675 PCT

IMPORTANT NOTIFICATION

International application No.
PCT/DK02/00673

International filing date (day/month/year)
08/10/2002

Priority date (day/month/year)
18/10/2001

Applicant

SFK-DANFOTECH A/S et al.

1. The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary examination report and its annexes, if any, established on the international application.
2. A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
3. Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.

4. REMINDER

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the PCT Applicant's Guide.

For the purpose of deciding whether the claimed invention is patentable or not, the elected Offices may apply criteria additional to or different from the criteria on which the international preliminary examination report is based (see Articles 27(5), 33(5)). Additional criteria may include e.g. exemptions from patentability and the requirements of enabling disclosure and of clarity and support of claims.

Name and mailing address of the IPEA/



European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 eprmu d
Fax: +49 89 2399 - 4465

Authorized officer

Hutterer, G

Tel. +49 89 2399-8066



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 17675 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/DK02/00673	International filing date (<i>day/month/year</i>) 08/10/2002	Priority date (<i>day/month/year</i>) 18/10/2001
International Patent Classification (IPC) or national classification and IPC A23B4/06		
Applicant SFK-DANFOTECH A/S et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.


2. This REPORT consists of a total of 4 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 03/05/2003	Date of completion of this report 04.06.2003
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Giménez Miralles, J Telephone No. +49 89 2399 8655



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK02/00673

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, pages:

1-7 as originally filed

Claims, No.:

1-14 as originally filed

Drawings, sheets:

1/3-3/3 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/DK02/00673

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims 1-14
	No:	Claims
Inventive step (IS)	Yes:	Claims 1-14
	No:	Claims
Industrial applicability (IA)	Yes:	Claims 1-14
	No:	Claims

2. Citations and explanations
see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/DK02/00673

Re Item V

- 1) Reference is made to the following document:

D1: EP-A-0 574 327 (JAEGER PARTICIPATIONS S.A.)

- 2) The subject-matter of present claims 1-14 complies with the requirements of novelty and inventive step as set forth in Article 33(2) and (3) PCT.

None of the prior art citations mentioned in the International Search Report anticipates or even fairly suggests an apparatus and a method for thawing frozen blocks of meat comprising a massage system consisting of a rotating/revolving drum supplied with inner massage wings, wherein the interior of said massage wings is supplied with a heating liquid, so that the temperature of the surface of said massage wings is higher than the temperature of the frozen meat block. Contact of the frozen meat block with said heated massage wings inside the revolving drum provides homogeneous heat exchange for thawing.

The closest prior art D1 discloses a rotating drum wherein heat exchange is performed simply by contacting the drum outer wall with air at room temperature by means of an air circulation system.

Accordingly, the subject-matter of present claims 1-14 is to be considered as non-obvious in the light of the prior art.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



10/491049



(43) International Publication Date
24 April 2003 (24.04.2003)

PCT

(10) International Publication Number
WO 03/032740 A1

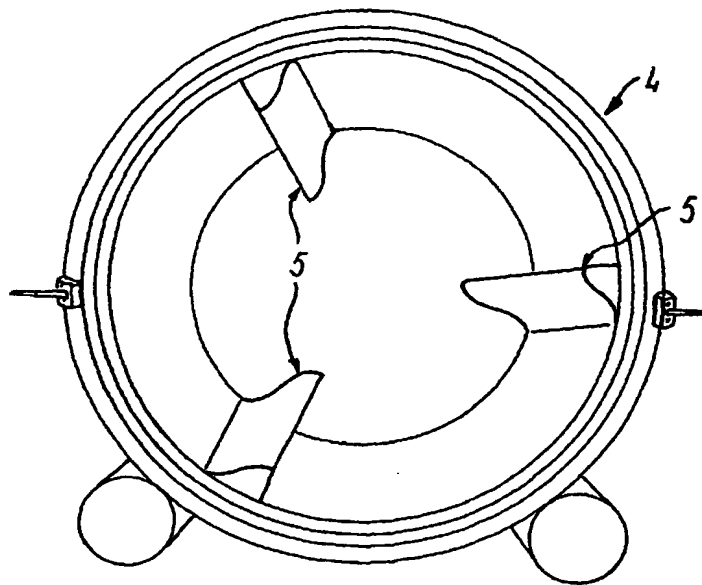
- (51) International Patent Classification⁷: A23B 4/06
- (21) International Application Number: PCT/DK02/00673
- (22) International Filing Date: 8 October 2002 (08.10.2002)
- (25) Filing Language: Danish
- (26) Publication Language: English
- (30) Priority Data:
PA 2001 01531 18 October 2001 (18.10.2001) DK
- (71) Applicant (for all designated States except US):
SFK-DANFOTECH A/S [DK/DK]; Indkildevej 2-4,
P.O.Box 821, DK-9100 Aalborg (DK).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): NIELSEN, Bjarne
[DK/DK]; Jættestuen 16, DK-9230 Svenstrup J (DK).
- (74) Agent: LARSEN & BIRKEHOLM A/S; Skandinavisk
Patentbureau, Banegårdspladsen 1, P.O. Box 362, DK-1570
Copenhagen V (DK).

- (81) Designated States (*national*): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CII, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK (utility model), SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— with international search report

[Continued on next page]

(54) Title: A METHOD AND MEANS OF THAWING MEAT AND USE THEREOF



(57) Abstract: The invention relates to a method of thawing one or more frozen blocks of meat, said blocks of meat being composed of units of meat frozen together. This object is achieved in that the frozen blocks of meat are placed in a drum of a massage system, said drum comprising carriers, and a liquid having a temperature higher than that of the frozen blocks of meat is supplied in the interior of the massage wings, and that brine having a temperature higher than that of the frozen blocks of meat is supplied to the drum. The drum rotates/revolves, and the blocks of meat are continuously broken up into smaller units of meat. Preferably, a negative pressure is established in the drum during thawing.

WO 03/032740 A1